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ABSTRACT

Heuristic models help writers recall information, sometimes revealing unique combinations of information in ways not conceived previously. This makes heuristics a valuable technique for helping beginning writers generate writing ideas. Observing that all culture is communication, Edward Hall has organized Primary Message Systems (PMS), a framework of ten anthropological modes that can be adapted to produce new connections latent in a subject matter. The PMS include interaction, association, subsistence, bisexuality, territoriality, temporality, learning, play, defense, and exploitation. Once writing students are familiar with the PMS definitions and questions, they can probe their imaginations to extract concrete subject matter for their compositions. When the students find that certain PMS generate more information than others, they can concentrate on these particular PMS to make hybrid questions for generating more specific information, focusing attention on particular topics, or eliciting unique approaches to traditional topics. This last point does not mean that PMS is an organizing procedure that produces fully defined topics or outlines of composition; but PMS is a prewriting activity that should help students collect a great deal of writing material. (RI)

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Cultural Heuristics: Topics of Invention Based on Human Behavior

Invention is one of the topics in contemporary rhetoric where research is opening exciting new territory, some of it beyond the bounds of traditional rhetoric. Investigation into heuristics,[1] methods of probing for ideas to write about, has borrowed from systems analysis techniques, physics, psychology, and other areas. It is understandable, of course, that such disciplinnary lines of inquiry should cross since the study of invention is the study of the mind and the matter with which it deals. Pursuing this cross-disciplinary approach, I have found in the study of cultural anthropology an analysis of culture which provides an extremely fruitful heuristic tool. Edward Hall in The Silent Language has devised a theory of communication called the Primary Message Systems that provides ten categories which probably cover all the topics possible in any culture. These categories, I feel, provide an excellent basis for heuristic probing.[2]

Before examining Hall's Primary Message System, to establish a basis for the idea in this paper, let us metaphorically examine the concept of heuristic. In a sense a heuristic is like the keyboard on a computer terminal. The keyboard gives us access to whatever information is programmed into the computer. If we hit the right keys, we get the appropriate information. The information to which we have access is, of course, all that stored in our brains. So in a sense a heuristic is a human information retrieval system. But there is another and perhaps more important function of heuristic: to generate new ideas or new combination of ideas. In this sense heuristics also are like computer terminal

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keyboards. They represent the matrix of all kinds of combinations of information. The keys allow us to crisscross, so to speak, the various bits of information in the data bank so that the combinations produce original information, i.e., new ideas and original approaches. In other words, a heuristics model not only allows us to retrieve information stored in our minds, but, if it is a skillfully made model, it also reveals how combinations of information not previously conceived can be generated. The crisscrossing of categories often emits an electrical spark of creative invention.

One of the reasons for proposing an heuristic model based on the cultural analysis of Hall, perhaps the most important reason, is that Hall's PMS is excellent at revealing new connections between the disparate information contained in our heads, so that genuinely new subject matter emerges. The reason for this feature of the PMS heuristic is that it identified ten categories under which all the stuff or subject matter of culture can be grouped, and it also assumes a structural connection among all the categories so that the human behavior described in one PMS can be reflected in the human behavior of any other PMS. Eventually I will get to examples of how this works, but for now, more general observations about heuristics.

One of the main problems in developing a viable heuristic is the accessibility of the system. That is, its ease of applicability. The very assessible, like Burke's Pentad, are quickly brought to mind by a nemonic formula, and readily applied. But even such ready formulations take some training in order that the short formulas generate other than short answers. To deal with the problem of application, a number of heuristics with long lists of questions have been devised. These are helpful in their explicitness, but cumbersome in their sheer bulk. Other heuristics, e.g., the tagmemic system, which have a

highly compact ontological structure, and which represent a complete epistemology are so concentrated that they require a great deal of training for the writer before they can be accessible. Their abstractness requires considerable skill in application. But unfortunately it is often the student who has trouble with abstractions who is in need of help in generating information.

It is my contention that Edward Hall's Primary Message Systems outlined in The Silent Languages can admirably be adapted to produce a heuristic that better than any other helps produce new connections latent in the subject matter.

I have tried to steer a middle course in the formulation of this cultural heuristic. It is explicit enough to be helpful to the student who is struggling to develop his imagination as a probing device and yet in the number of questions it is limited enough so that an overview of the system is easily obtained. And it is concretely grounded in subject matter or the stuff of culture and human behavior and not formulated in highly abstract terms which require considerable skill in the student who translates then into concrete subject matter.

Now let me move to an explanation of the concept of Primary Message Systems which provides the heuristic which can be used with relative ease and which draws formerly unseen connections between the pieces of subject matter generated.

First I will merely list the PMS so that you may have a definite point of reference as I explain the concept underlying them.

Interaction, Association, Subsistence, Bisexuality, Territoriality, Temporality, Learning, Play, Defense and Exploitation.

Edward Hall has observed that culture is communication. That is all human behavior in the cultures he has observed forms a system of messages. These message systems make it possible to read the "sometimes hidden" meaning of behavior. In order to codify this communication system, Hall has looked for the

grammar or logic of the PMS and has discovered that there are ten separate channels of communication rooted in biology. They form an anthropological analysis of the modes in which all explicit and implicit communication about human behavior take place. And they form the dimensions of human behavior. Now the importance of this for us is that the ten message systems form ten categories or topics under which all conceivable subject matter can be placed. Each category or message system can be put in the form of a question which can be used to probe any topic. In other words, any general topic the student might write about can be examined in the light of each PMS so that the hidden messages or implied meanings related to that PMS are discovered about the topic. Theoritically when the ten probes have been fully applied to the topic, all possible connections between it and related subject matter will be revealed.

Before I put each PMS in the form of a probing question, let me define each somewhat fully.

1. Interaction is the reactability of all living substance to stimulus. The most basic form of interaction is the reaction of a cell to stimulus. A more complex form is reaction to language by human beings.
2. Association involves forming of groups and the resulting rank or status which follows from grouping. The grouping can be vertical and hierarchical or horizontal and egalitarian.
3. Subsistence is the process of obtaining whatever is necessary to maintain life. It involves micro and macro economic systems from primitive agriculture to sophisticated technological-industrical economics.
4. Bisexuality is the system by which society assigns cultural roles which differentiate male and female. It is society's indication of a desire to polarize some aspects of sexual behavior. (This wide-

spread cultural differentiation is of course being challenged in some ways by feminist movements.)

5. Territoriality is the system which involves location, orientation, and boundaries in space, personal and otherwise.
6. Temporality is the system which concerns time, timing, and rhythmic occurrence. It involves past, present, future, and change.
7. Learning is the intake of data in order to respond to or ignore the environment.
8. Play is a pleasure-giving experimentation with the environment in regularized (by rules) or non-regularized patterns. It is testing the possibilities in the environment.
9. Defense is the system involving any activity which wards off harm or danger.
10. Exploitation is the system by which man uses things in the environment to serve his purposes.

I think each primary message system is clear in itself as a category which describes modes of human behavior. But why each is a message system is not immediately apparent. Let me explain that. Territorality can be a message system when it communciates intimacy as one person allows another to intrude into his or her personal space. Territorality communicates authority or status by the arrangment of space in offices, etc. Subsistence communicates something of preoccupations and hence values of a civilization. Our credit card economy communicates many things, too complicated to go into, about us. And so on with each PMS.

It is in the implied communication value of the PMS that their value to us lies. As a message each can be formulated into a major question and sub-questions

to probe the out-of-awareness meaning of any topic.

In addition, it is in the nature of the PMS, since they are so primal, to overlap and imply each other. An example would be bisexuality and subsistence. Unfortunate though it may be, jobs by which we gain subsistence are often attached to sex roles. Play often involves boundary or territory. Interaction through some kind of language is essential to establish and maintain the ranking of association. I have said that each PMS can become a probing main question with sub-questions for explicitness. Let me now formulate each PMS into such a probe. We have ten PMS and ten questions.

1. Interaction

   What things in the topic interact with other things and how and why.

   How and why do I react to things in the topic?

   How do others react to things in the topic? and why?

   How does the topic interact with the environment? Why?

2. What groupings, what ranking, and what status is involved in the topic?

   How are my associations, rank, or status affected by the topic? Why?

   How are the associations, rank, or status of <u>others</u> affected by the topic? Why?

3. What in the topic is involved in subsistence or the acquiring, production or sale of food, clothing or shelter, or other goods?

   How is my subsistence involved in the topic? Why?

   How is the subsistence of <u>others</u>? Why?

4. Is or how is sexual role or sexual differentiation involved in the topic?

   How is <u>my</u> sexuality or sexual role involved in the topic. Why?

   How is the sexuality or sexual role of <u>others</u> involved in the topic? Why?

5. Is territority or boundary or place or space literally or figuratively involved in the topic?

   How does the topic affect my literal or figurative territory or space or location? Why?

   How does the topic affect the literal or figurative territory or space or location of others? Why?

6. Is time a factor in this topic: Is past, present, or future a factor. Is change a factor in this topic? Is timing involved in the topic? Is there a rhythm of events or things to be observed?

   How does time affect me in relation to this topic? Why?

   How does time affect others in relation to this topic? Why?

7. How is learning involved in this topic and what is learned? What is the result?

   What do I learn in relation to this topic? How? Why?

   What do others learn in relation to this topic? How? Why?

8. How is play, or testing, or experimenting involved in this topic? How am I affected by the play involved in this topic? Why? How are others involved in the play involved in this topic? Why?

9. How is defense and against what and by whom involved in this topic?

   In what way do I use defense in relation to this topic?

   In what way do others use defense in relation to this topic?

10. How is exploitation, or the use of persons or things in the environment involved in this topic?

    Does this topic call for my use or exploitation of things or persons in the environment?

Does this topic call for others to use or exploitate things or persons in the environment?

Incidentally rearranged the PMS can for a number of nemonic devices: LT BASED TIP; BASE TIPD LT; LTD BASE TIP: LITE BASD TIP: TILT BASED T. Once the simple method of questioning, i.e., the general question followed by the sub-questions relating the PMS to I and other, is mastered the student could use this probe without a written guide.

All the questions are self-explanatory, but let me observe something about them and make suggestions about their use. First, in keeping with good rhetorical theory, ancient and modern, they encompass subject matter (topic), speaker (the I in the subquestions), and the audience (the other in the subquestions). As far as subject matter, as I have said before, they cover all the dimensions of human behavior.

Now as to their use. The best way to use the PMS is to proceed systematically down the list of questions. If these answers produce other questions or implications or loose ends of somekind, then these should be followed up. Once the student gets into the habit of following up implications, the PMS heuristic will become even more helpful. It is a good idea to lead the student through this procedure with a number of topics. The next thing to do is to note which PMS generate more information than others. These obviously become keys in the writer's mind and should be reexamined. Then these key PMS should be crisscrossed with each other to see what such hybridization produces. As an example of this cross fertilization, let us assume that two PMS, subsistence and learning produce a good deal of material. Then the writer should ask the question: "What is the relation between subsistence and learning; for instance, "How does my subsistence influence my learning" or "How does my learning affect my subsistence?"

Now all this pre-writing activity does not produce a defined topic much less an outline. That organizing function is separate from this procedure. But with this exercise the student should have plenty of material to choose from as he begins writing and planning.

Now to demonstrate the cultural heuristic, I would ask someone in the room to suggest a composition topic of somekind and we will proceed through the questions and such questions so we can actually see how the PMS probe works.